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The

New York

Steam

Company's

SYSTEM OF STREET DISTRIBUTION

FOR

NEW YORK CITY.

OFFICE, No. 22 CORTLANDT STREET,

NEW YORK.

THE NEW YORK



STEAM COMPANY

General Map showing the lo
properties owned by the Comp
Steam Stations now operate
constructed; also the princi
which Steam Mains are no
tended to be laid during 1
1884'85'86 The Mains to
fast as possible to cover:

SCALE OF
0 500 1000



THE NEW YORK STEAM COMPANY

SYSTEM OF

Street Steam Distribution

IN

NEW YORK CITY.

OFFICERS:

W. C. ANDREWS,	-	-	-	-	-	President.
WM. P. SHINN,	-	-	-	-	-	Vice-President.
J. A. BOSTWICK,	-	-	-	-	-	Treasurer.
R. E. ROCKWELL,	-	-	-	-	-	Secretary.
CHAS. E. EMERY,	-	-	-	-	-	Engineer and Superintendent.

Office, No. 22 Cortlandt Street,

NEW YORK.

Statement of progress made to January 1st, 1884.

THE NEW YORK STEAM COMPANY

Steam Distribution

NEW YORK CITY

NEW YORK

NAME	ADDRESS	PHONE
ALBANY	100 N. 3RD ST.	100
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Office No. 22, 2nd St. N.Y.C.

NEW YORK

Printed at the New York Steam Company, 100 N. 3rd St., N.Y.C.

The New York Steam Company.

THE NEW YORK STEAM COMPANY has been supplying steam for eighteen months, and has now about five miles of its street steam system in active use. The business is a success. The people of New York can now look forward to its more rapid development, until it is in all the streets of the city.

Like most new things that move people out of the old ruts, they have said "it cannot be done;" but it is done. Five miles are as good as fifty for proof. They said, "it will condense;" *but it doesn't*. The loss is a less per centage than in the distribution of gas. It is simply a question of conditions, and the public, as usual, has been mistaken.

They said "steam cannot be carried across the street—it will condense." The New York Steam Co. is prepared to say, as the result of its experience, that *by its methods* it can convey it five miles. As stated, it is all a question of conditions. Ice is usually a very perishable substance; it will melt, but there are ice packs in the world thousands of years old. Under certain conditions it seems to be even less destructible than granite; the facts are, once ice, always ice, if you prevent its loss of cold, or rather its absorption of heat. And so also, once steam always steam, if you prevent its loss of heat. The New York Steam Co. therefore puts steam under such conditions as to prevent its loss of heat, and the distance it may be carried is practically only limited by friction in the pipes. As our pipes are very large the friction is very small. Of course we do not say it is possible to prevent absolutely *all* loss of heat, but this Company has methods of its own, and under its exclusive

1090-B365 TCF

control, that so *arrest* the radiation of heat in its street system of pipes as to make it scarcely worth the counting. It is certainly a less percentage than the estimated loss of the gas companies in the distribution of gas.

The general plan of this Company embraces Ten Steam Stations and Districts, to cover New York City from the Battery to Seventieth Street, east of the Park, and eventually other stations as the city grows. The properties for these ten stations are purchased, amounting to about one million of dollars in value.

The location of these respectively may be seen by reference to the map attached hereto, and marked A, B, &c., and signifying steam Station A, steam Station B, &c. It is from Station B that steam is now being supplied to more than two hundred and fifty consumers in the various streets of Broadway, Wall, Liberty, Maiden Lane, Cortlandt, Greenwich, Fulton, Park Row, and so on up to Warren Street, as may be seen by reference to another map herein, showing the location of all the steam mains in active use to this date. The street is given, name of consumer, number in each street, and date at which service was commenced to each consumer on the lines of this Company. We, with confidence, refer to any and all of these for information. The service we believe to be perfect, and within reasonable limits of cost. In looking this over and noting the dates, we think the thoughtful reader will be surprised that so much work and such large results should have been accomplished in so short a time. The business was novel and without a parallel in the world. We were forced to make new inventions, and in all essential particulars our system is a new departure; it is entirely different from old methods.

There is much concerning this Company that we should be glad to have the public know about, or those having special reason for desiring information, and we feel that every resident of New York, and especially owners of

property, are directly interested in our work. We know from evidence now had, and as the result of our experience thus far, that the cost of laying our pipes in any particular street, is paid for under a law of compensation, over and over again, by the increased value given to property. The reason is plain: By our system every building can have elevators, can have *heat, light and power* at the minimum of possible cost, whereas only the larger and more costly buildings have heretofore been able to have these very desirable but costly improvements.

We have taken hold of what we believe to be the *progressive idea* for distribution of heat, power and light in compactly built cities. This includes also service for cooking, laundry work, and all purposes for which steam can be used. This pertains to manufacturers and general business uses, and the numerous purposes in the domestic economy. As a large number of business men and residents of the city will be interested to know our plans for the further extension of street mains, we will state that we shall continue to extend our system in the lower part of the city, taking in the large Dry-goods District between Chambers and Canal Streets, as also all streets not yet supplied between Greenwich and Pearl.

Our arrangements are being made also for extending the steam system into the principal streets in the upper part of the city next season, and thence-forward as rapidly as possible until all of the well-built streets are fully supplied. This will require 250 to 300 miles of street mains. We shall commence at Twenty-third Street and Madison Square, and taking in the Hotel District on Broadway to Thirty-fourth Street, including the numerous theatres, club houses, flats, etc., will push our work up Fifth Avenue, Madison and Park Avenues to Seventieth Street, and upon the included lateral streets. This large district will be supplied with steam from stations located on the East River, as follows: Station K,

occupying the entire water front from Thirty-second to Thirty-third Street (below Hunter's Point Ferry), and Station N, located on Fifty-sixth Street. Both these Stations will be built on the water or dock line, so as to get coal cheaply, we having demonstrated that it is cheaper to convey the steam than to cart the coal. Large feeding mains, two feet in diameter, will go out of these stations and cross the various avenues upon which smaller mains will be laid, the general features being similar to the distribution of gas and water.

Some idea of the magnitude of these large steam Stations may be had when we state that Station B (now in use), will, when completed, consume about one thousand tons of coal per day, and with that view this Company owns property fronting on Greenwich, Cortlandt and Dey Streets, as also Washington and West Streets, thus extending from Greenwich Street through two blocks to the Hudson River at West Street. The uptown Stations K and N, before referred to, will also be constructed on the same general plan, as to size and capacity.

It will be noticed by the reflective reader that the practical result of the operations of The New York Steam Co. is to take *five thousand steam boilers* now in use in New York City, as shown by the City Records, most of which (about four-fifths) are under the sidewalks, and put them all in a few places in fire proof buildings, and under the most careful and scientific supervision. It is apparent that this will greatly reduce the risk from fire and explosion, and will (as gas and water have done) greatly contribute to increase the safety, health and comfort of the people.

To relieve the minds of those who have heard of explosions of steam pipes in the streets, we will say that we have never had one, and under our form of construction can never by any possibility have one. All our pipes are wrought iron, and all our construction is made on a "factor of safety" of

more than ten to one, which is double the factor of safety of the Brooklyn Bridge, and is double that of the very best practice in construction of railroad bridges.

As more than an equivalent also for the complaints about "tearing up the streets," thus making, we admit, a temporary (but unavoidable) annoyance, we will show from evidence in our possession, that we do not enter a street and put down our pipes without property and business in such street being materially benefitted. The property is more readily rentable and at better prices.

It cannot be doubted that from the putting down of two hundred and fifty miles and more of a District Steam System in the streets of New York City, carrying the full pressure of eighty pounds (which is more than sufficient for any work on this Island), manufactures will be very largely increased. In the absence of water power, steam is the only agency for power, and cheap steam from the streets, always ready, day and night, and the facility and ease with which it may be brought into basement or attic, must of necessity develop active industries. Small manufactures will be promoted, and any mechanic may have steam power in his house, and his wife and children can aid him *at home* in his pursuit. It is not necessary that he should be a capitalist to start business. The New York Steam Co. will start him for fifty dollars.

This is no fancy picture. New York is already the largest manufacturing city in the United States, and we have the confidence, born of success, that we can double these varied industries within ten years after two hundred and fifty miles of steam pipes shall have been laid and opened for public use.

As an evidence of the good faith of this Company in its earnest endeavor to do this work, we beg to state that we have expended to this time for purchase of real estate and in construction, about two millions of dollars ; that we have

issued no bonds ; that there are practically no fixed charges against the Company, for its income is already more than sufficient to pay all interest and taxes ; that we have paid out our own money, raised exclusively by subscriptions to its capital stock ; and the Company has in this short time reached a paying basis.

We have now over two hundred buildings on our lines, including 160 engines for power, supplied with steam wholly by this Company from its station B.

It will be news to many that nearly all the principal Newspapers in New York City are, and many of them have been for months, operated with steam supplied wholly by this Company. The *Times*, the *World*, *Commercial Advertiser*, the *Tribune*, and five others ; and many printing companies are now so supplied with their power and heat, notwithstanding most of them have boilers on their own premises. The new Produce Exchange, with nine elevators and electric lights ; the new building of the Mutual Life Ins. Co. of New York, on the old P. O. site, Nassau Street, with six elevators and fifteen hundred incandescent electric lights, are now contracted for, and our steam is in their buildings. *These buildings have no steam boilers on their premises.* This is a new departure, and the time has come that the owners of new buildings located on the lines of The New York Steam Company should no more think of putting in steam boilers than of erecting a gas-works on the premises.

The general scope and plan of the Company cover a much broader field than is publicly known. As compared with gas companies, street car lines, elevated roads, and other highly useful and now indispensable organizations, we reach, or will reach, the people in their business houses and more intimately in their *Homes*, supplying their wants as no other organization does or can do. We heat the buildings ; we supply power for all purposes ; supply steam for cooking and laundry work, for baths and many other purposes in the

domestic economy requiring water as well as steam. The ease and facility with which it is turned on and off, like gas or water, ready at the instant, and abundant supply day and night, can only be fully appreciated by householders and especially the Mistress of the house.

To mention one thing further in detail, *cooking* may sound small. It is, and will be, in fact, one of the very largest in its consumption of steam. There are one and a quarter millions of people in New York City who want three meals a day. There is one restaurant which has used our steam for eighteen months (Smith & McNell, Greenwich Street), and which buys from this Company fifteen thousand dollars worth of steam per annum. This is probably the largest restaurant in the world, serving about ten thousand meals per day. Messrs. Nash & Crook in the New York Times building, is the next in size in the city, and one of the best known. The proprietors of both of these immense establishments say they would not go back to their former mode of cooking, if the coal were furnished them for nothing.

The importance and advantages of this system over existing modes may be briefly summarized as follows: Such perfection of service as can be had by no other method. The same can be had at no higher price in proportion to service rendered. Payment by meter in proportion to amount used. Lessening materially fire risk and consequent reduction of insurance. Freedom from danger of explosion by having no boiler on the premises. Relief from coal dust and ashes, and storage of coal and ashes. Relief from oppressive heat in summer, caused by boilers and cooking ranges. Facility and cheapness of electric lights by isolated plant on the premises. Melting of snow in winter when desirable in any street by turning on the steam hose. An absolutely certain method of putting out fire by attaching hose to steam hydrants. Or, in the great Dry-goods District, by stand pipes connected with steam hydrants. By these

precautions, absolutely preventing in this city a great conflagration, or repetition in the great Dry-goods District of a "Chicago fire." Uniformity of supply of heat, by regulating which, any temperature desired is maintained. Being on tap like gas, a little pains will prevent irregularities in temperature. This cannot be so well done by present methods of heating, and it is well known much sickness is caused by imperfect heating apparatus. Freedom from offensive escaping gases, so frequent in hot air furnaces. A large increase in value of city property, by cheap power and heat.

The New York Steam Company desires to reply to a question frequently asked, "is there not danger from your steam pipes in the streets?" The reply is no, no danger at all. "But if it explodes?" The reply again is there is no more danger of our steam pipes "exploding" than of Croton water pipes exploding; not a particle.

The fact is, when the steam leaves the Boiler Station it contains the energy due to eighty pounds pressure per square inch. As there is no fire under the pipes in the streets along the route of delivery, it certainly cannot take up energy or by any possibility increase it, but on the contrary there is a slight tendency to lose some of it; and further, as this Company has entirely discarded the old and inferior slip-joint system of providing for the expansion and contraction of its pipes, it has therefore no occasion to use manholes. The officers of this Company have utterly refused to have anything to do with any street steam system requiring man-holes to be used.

They *know* such system to be exceedingly dangerous in the streets of New York City. They appreciate that the safety of the Public in its own streets is of primary and vital importance.

On the score of safety The New York Steam Company appeals to the facts: first, that there is nothing in its system that can by any possibility be reasonably considered dan

gerous ; and secondly, that it has been in active use in the streets for a year and a half. It has grown from one mile of street main in use, June 1st, 1882, to five miles in use Jan. 1st, 1884, all the time under full pressure of steam, and no one has been injured. It is quite doubtful if as much can be said of the street car lines or omnibuses.

Thus much has been said to quiet the nerves of people, who not knowing the facts, have been more or less disturbed.

New York City is being rebuilt. There are only so many square feet on this island, and as land becomes more valuable, they must go up in the air. This makes it the most compactly built city in the world.

Every building must eventually have elevators, and these cannot be operated except by *steam power*. Even hydraulic elevators take just as much steam to pump the water. There is no such thing as cheating nature. She will have her equivalent every time. Even if electric power shall be used, still the same ; and whoever gets track of an electric wire will find a steam boiler at the end of it.

It seems conclusive that in no other city are there conditions so favorable to success. A careful estimate of the work to be done would seem to show that the volume of business must greatly exceed that of all the gas companies combined, and be very much greater than that of the elevated roads. The reason for this is plain : Simply that we do so much more that people *want done*. We supply more varied wants.

In a city so large and compactly built as New York, the danger from fire is always present. More than this, the possibility of a great fire like that of Chicago or Boston is always present. Admitting that we have one of the best fire departments in the world, and that we have, or will in future have, an abundant supply of water, still, experience teaches that a fire may get the upper hand and sweep whole blocks. This brings us face to face with a very important existing

fact in this city. There is a Dry-goods District, so called, which is the largest of its kind in the world. It is said to contain in a square mile, one thousand million dollars of value. Whether this is an over statement or not, it is certainly very large, and it is no doubt true, as claimed, that in no equal space in any other city is there concentrated so much value. Neither London nor Paris can equal it.

The buildings are none of them practically fire proof, and are filled with combustible material. Under present conditions, there may come a conflagration and sweep the whole of it, or so much of it as to bankrupt most of the principal insurance companies in this country. That there should be something done to prevent such a possible calamity is generally admitted. But what? The first impulse is more water, but it will take several years to get more water, and where the supply is abundant, experience has shown there are many other circumstances and conditions to prevent its successful use. What then? The New York Steam Company asks the privilege of stating its own case.

It is well known that steam, if applied in sufficient quantity in an inclosed space, is the best mode of putting out fire. Its operation is almost instantaneous. How does it do it? Simply by expelling the air and taking its place; of course, the fire cannot burn without air and it goes out. But the trouble has been that usually, unless the space to be filled is very small, there is not steam enough at hand to do any good. Indeed, it may do harm by stimulating the draft. Suppose a dry goods store to be on fire. It originates on some one floor or in the basement. One steam boiler on the premises will do no good, neither in all probability will two, four or six; certainly if the space to be filled is large they cannot fill it and drive out the air; even if they could, the air would rush in faster than any individual set of boilers could make steam to keep it out. What then

is the remedy, and how can The New York Steam Company apply it? We answer that we have now five miles of large steam mains in use in the streets, constantly under pressure of eighty pounds, day and night, Sundays included. In other words, it is turned on to stay, and we see no reason for failure at any time, at any moment, for an indefinite time to come—say, twenty-five years, fifty years, a hundred years—call it as you please; our construction is far better and more durable than that for either gas or water. By the time we pipe the Dry-goods District we will have ten miles of street system in the lower part of the city. But eventually our whole system, amounting to two or three hundred miles, will be connected as one complete system. These street mains, many of them, are very large; most of our pipes so far laid are eleven, thirteen, fifteen and sixteen inches in diameter. We will soon have mains twenty inches and two feet in diameter. Back of all these are the resources—the steam generating capacity of such immense plants of boilers as were never before built. These are entirely new conditions that never before existed. Now return, if you please, to the original proposition. Suppose a fire occurs in a dry goods building; it is a large building—very large; Claflin & Co.'s, if you choose. The New York Steam Company with its appliances and resources will fill any floor in the building, in three to five minutes, and maintain the pressure of steam, keeping the air expelled until the fire is extinguished.

If this be so, why, it may be asked, has it not been so applied long ago? The answer is, there was *never* before any large steam system of street mains, any more than there were elevated railroads in this city, or than there were steamships to cross the Atlantic in six days. These things come in due course of time by process of gradual development, and when they do come, wise men will avail themselves of their advantages.

The officers and engineers of The New York Steam

Company have made this subject a profound study. They believe they have mastered it; they think also, with the work now in operation for more than a year and with such complete success, their opinions on this subject are entitled to respectful consideration. They therefore hold themselves responsible for the substantial correctness of the statements herein made.

The future of New York City is not uncertain. It will be the largest and richest city in the world. No other city has a continent at its back, under one government. It is important, therefore, that what is done in New York should be *well done*. No sham will pay. Nothing can be too well done within a reasonable limit of cost, and it must be, at whatever cost, sufficiently well done to answer the purpose.

Fully appreciating this, The New York Steam Co., its officers and employees, have faithfully and vigorously pursued this subject, and the Company has done and is doing such work as was never before accomplished in the history of steam.

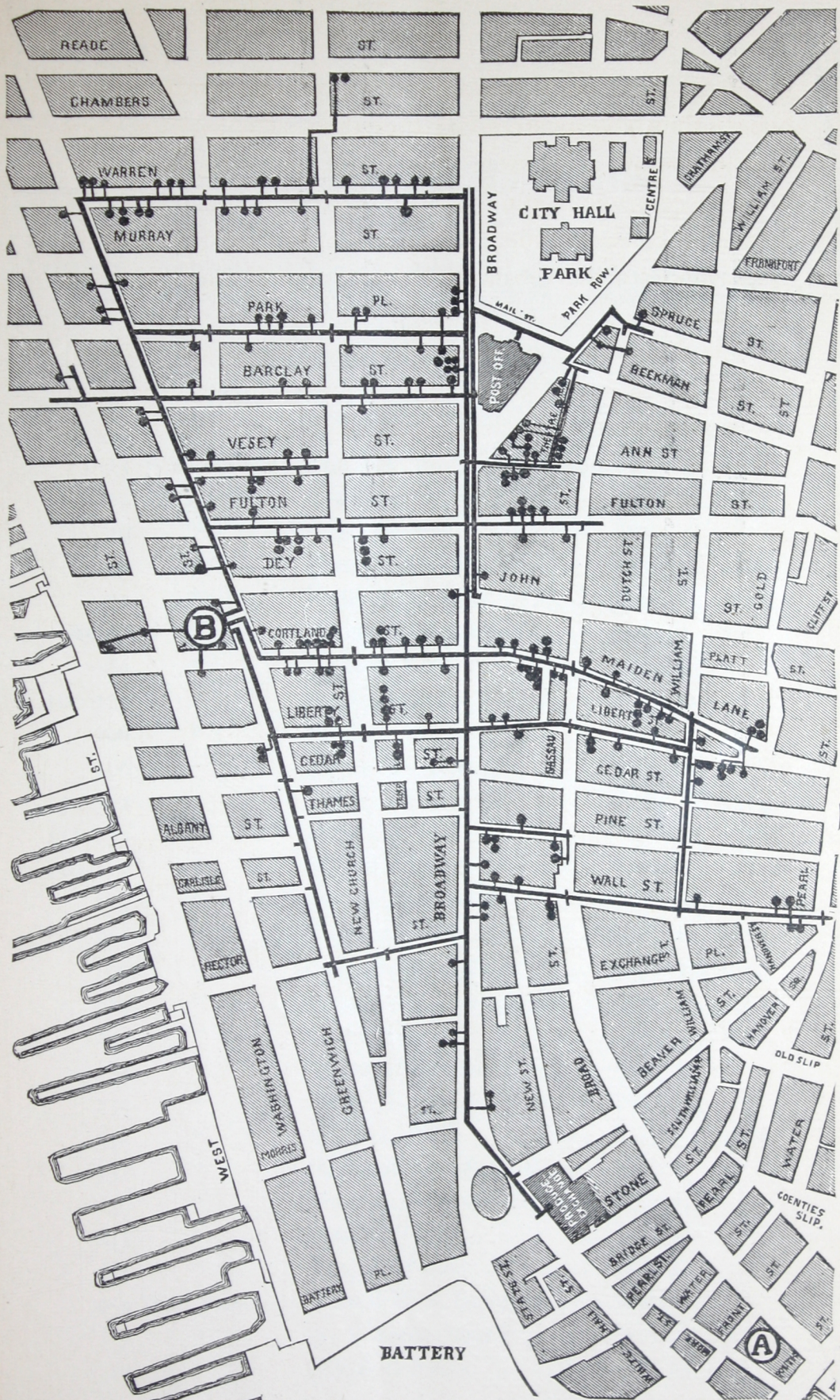
Five miles of steam mains, from six to ten feet underground, in perfect working order, at eighty pounds pressure to the square inch, speaks for itself. It is an accomplished fact, and we see nothing to prevent this Company entering more and more into the most intimate relations with the people, and in the near future becoming the largest and the most potent for good of any in the city.

W. C. ANDREWS,

President.

NEW YORK, Jan. 1st, 1884.

Map showing the Location of the Mains and Services of The New York Steam Co.



Five miles of Street Mains in operation, and now over 250 Consumers, including 160 Engines for power.

LIST OF CONSUMERS

OF

THE NEW YORK STEAM COMPANY,

December 1st, 1883.

1-13	Whitehall St.,	The N. Y. Produce Exchange.	May 1,	1883.
34	Broadway.....	Lombard, Ayres & Co.....	Nov. 13,	1882.
49	"	A. L. Meyers.....	Dec. 22,	"
49	"	Postal Telegraph Co.....	Feb. 2,	1883.
51	"	Paris, Allen & Co.....	Dec. 16,	1882.
65-67	"	American Express Co.....	Sept. 5,	"
84	"	William Koch.....	Nov. 28,	"
100-102	"	Continental Ins. Co.....	June 18,	"
106	"	William Wilson.....	Oct. 16,	"
106	"	Henderson & Halle.....	Oct. 26,	"
130-132	"	Cable, Bailey & Co.....	Dec. 1,	1883.
135-137	"	Mutual Union Tel. Co.....	Oct. 20,	1882.
169-171	"	Benedict Building.....	July 31,	"
173	"	Jas. A. Alexander.....	Sept. 28,	"
191	"	Mercantile Nat. Bank.....	Oct. 11,	1883.
196	"	Chatham Nat. Bank.....	Sept. 15,	1882.
229	"	Estate of J. C. Hamilton....	Oct. 16,	1883.
233	"	William Kurtz.....	Oct. 18,	1882.
234	"	Thomas Maddock.....	Nov. 1,	"
234	"	Faure Electric L. & St. Co..	Nov. 13,	"
234	"	Maurice Daly.....	July 1,	1883.
237	"	National Broadway Bank...	Feb. 1,	"
239	"	Gen. Soc. Mechs. & Tradesm'n	July 1,	"
243	"	Mary C. King.....	July 1,	"
245	"	George Munro.....	May 1,	"
2-4	Wall Street...	United Bank Building.....	March 3,	"
7	"	W. Wheeler Smith.....	Nov. 13,	1882.
12	"	Hatch & Foote.....	Oct. 23,	"

21	Wall Street...	Moller & Co.....	Nov. 1, 1883.
21	"	A. H. Wheeler & Co.....	Nov. 1, "
48	"	Bank of New York.....	Dec. 27, 1882.
67	"	Henry Parish.....	Dec. 18 "
68	"	W. H. Schermerhorn.....	Nov. 1, 1883.
69	"	John Taylor Johnston.....	May 1, "
72	"	N. Y. Fire Ins. Co.....	Oct. 1, "
1	Pine Street...	J. S. Bradley, Jr.....	Oct. 26, 1882.
8-10	"	Estate of Stephen Storm...	Nov. 1, 1883.
11	"	Alexander Duncan.....	Oct. 1, 1882.
2	Liberty St....	Motley & Sterling.....	Oct. 5, 1883.
2	"	Sanchez & Haya.....	Nov. 1, "
23	"	José G. Garcia.....	Dec. 1, 1882.
32	"	F. J. Stone.....	Nov. 6, "
55-57	"	Bryant Building Co.....	Dec. 1, 1883.
60-62	"	Alanson Trask.....	July 1, "
65	"	Bowne & Co.....	May 1, "
87	"	The Hazard M'fg Co.....	May 1, "
92-94	"	Otis Brothers & Co.....	May 1, "
95	"	Milliken & Smith.....	Oct. 25, "
95	"	E. T. Day.....	Oct. 25, "
95-97	"	Gundlach & Jackson.....	May 1, "
107	"	E. E. Roberts & Co.....	Feb. 14, "
108	"	Phoenix Packing & Rubber Co.	Jan 15, "
108	"	C. G. Buchanan.....	May 1, "
109	"	A. Aller.....	Nov. 1, "
109	"	F. P. Jewett & Co.....	Nov. 1, "
110-112	"	J. H. Bunnell & Co.....	Nov. 1, "
3-3½	Maiden Lane..	Byam K. Stevens.....	May 1, "
5-7	"	C. Rosswog & Son.....	May 1, "
6	"	Wilcox Silver Plate Co.....	Oct. 19, 1882.
15	"	L. Strasburger & Co.....	Oct. 29, 1883.
16	"	Mathey Bros. & Mathez.....	Nov. 29, 1883.
16	"	C. Huntley.....	Jan. 1, 1883.
16-18	"	Aiken, Lambert & Co.....	May 1, "
18	"	Dederick & Co.....	Nov. 14, 1882.
20	"	J. A. Mathewson & Co.....	Dec. 11, "
21	"	Wm. Kinscherf.....	April 27, 1883.
21	"	Cross & Beguelin.....	Nov. 1, "

22 Maiden Lane..	John E. Hyde's Sons.....	May 1, 1883.
29 "	Randel, Baremore & Billings.	Oct. 15, 1882.
40 "	Falkenau, Oppenheimer & Co.	Feb. 2, 1883.
52 "	Noah Mitchell.....	May 1, "
52 "	L. Herzog & Co.....	Oct. 1, "
52 "	Waterbury Watch Co.....	Nov. 1, "
54 "	Sondheim, Alsberg & Co....	July 1, "
60 "	Parke, Davis & Co.....	Oct. 15, 1882.
78 "	Pearl M'fg Co.....	May 1, 1883.
80 "	Williams, Rogers & Pyatt...	May 1, "
85 "	M. & E. Salomon.....	Oct. 8, "
87 "	H. W. Johns' M'fg Co.....	Oct. 5, "
87 "	Gridley & Co.....	Oct. 5, "
12 Cortlandt St...	J. Q. Maynard.....	Nov. 1, 1883.
16 "	C. H. Delamater & Co.....	Oct. 15, 1882.
22 "	The New York Steam Co...	Oct. 15, "
26 "	Richard Quirk.....	Sept. 15, 1882.
30 "	Babcock & Wilcox Co.....	Nov. 16 "
30 "	N.Y. Safety Steam Power Co.	Nov. 1, 1883.
32 "	Metropolitan M'fg Co.....	Oct. 25, 1882.
35-37 "	Peter Henderson & Co.....	Nov. 24, "
38 "	Randolph Brandt.....	May 1, 1883.
40 "	Wm. C. Owens.....	Sept. 1, 1882.
46 "	J. S. Urquhart.....	Oct. 15, "
46 "	Dexter Engine Co.....	Nov. 22, "
47 "	C. W. F. Dare.....	Sept. 15, "
49 "	J. H. Stilling & Co.....	Mar. 24, 1883.
60 "	Goldschmidt, Dreyfuss & Bro.	May 25, 1882.
60 "	Seidenberg & Co.....	Sept. 17, 1883.
82 "	A. W. Harris & Co.....	May 1, "
90-92 "	Glen Island Hotel.....	Oct. 16, "
126-136 Fulton Street..	N.Y. Commercial Advertiser.	Dec. 4, 1882.
141-145 "	M. V. Cable.....	May 1, 1883.
144 "	E. A. & W. D. Currier.....	July 1, "
153 "	J. H. Hummel.....	Nov. 21, 1882.
155 "	E. D. Slater.....	Dec. 1, "
155 "	H. S. Ingersoll.....	July 1, 1883.
159 "	J. W. Surbrug.....	Nov. 28, 1882.
178 "	Cornell & Co.....	Jan. 31, 1883.

182	Fulton Street.	The Centaur Co.....	Oct. 6,	1883.
182	"	The Maltine M'fg Co.....	Oct. 6,	"
192	"	Underhill, Osborne & Co....	May 1,	"
196	"	Beinecke & Co.....	Nov. 1,	"
196-198	"	Argyle Press.....	Dec. 23,	1882.
204	"	J. McArthur & Co.....	July 31,	"
206-208	"	W. A. Bingham.....	Oct. 18,	"
206-208	"	U. S. Illuminating Co.....	July 9,	"
206-208	"	Martin B. Brown.....	Nov. 1,	1883.
215-217	"	Anglo-American Drug Co....	March 1,	"
10-12	Ann Street....	Peter Smith.....	Dec. 12,	1882.
11	"	John J. Byrne.....	Nov. 14,	"
12	"	N. Y. Café Co.....	July 1,	1883.
13	"	H. Moller.....	Nov. 14,	1882.
13	"	Delacy & Co.....	Oct. 19,	1883.
14	"	J. B. Thorpe.....	Nov. 24,	1882.
16	"	Thos. J. Brosnan.....	Nov. 1,	1883.
23	"	C. C. Kimball.....	Jan. 15,	"
36	Vesey Street..	Chas. Hart.....	June 12,	1882.
36	"	George McNamara.....	July 12,	"
38	"	Met. Job Printing Office...	April 27,	"
41	"	Callanan & Kemp.....	Nov. 18,	"
48	"	Fellow's Medical M'fg Co...	Nov. 6,	"
48	"	C. von Dannenberg.....	April 1,	1883.
53	"	S. D. Wilson & Co.....	Oct. 15,	1882.
54	"	The Vanderveer & Holmes		
		Biscuit Co.....	Dec. 1,	1883.
61	"	J. H. & H. Wellbrock.....	Dec. 1,	"
9	Barclay Street.	J. H. Longstreet.....	Mar. 23	"
11	"	P. Scherer & Co.....	Aug. 2,	1882.
14	"	Reuben Freeman.....	May 1,	1883.
19	"	S. V. R. Cruger.....	Aug. 1,	1882.
29	"	O. A. Gager.....	May 1,	1883.
37	"	Meriden Mal. Iron Co.....	Dec. 9,	1882.
61	"	Schall & Co.....	Sept. 18,	"
72-74	"	J. W. Huchting.....	July 1,	1883.
7	Park Place....	Unexcelled Fireworks Co....	Nov. 13,	1882.
23	"	Gutta Per. & Rubber M'fg Co.	Jan. 15,	1883.
25	"	Vanhorne, Griffen & Co.....	Nov. 6,	1882.

26-28	Park Place....	Rogers & Sherwood.....	Jan. 12, 1883.
29-33	"	C. F. A. Hinrichs.....	Oct. 1, "
39	"	American Press Ass'n.....	Aug. 6, "
43	"	A. & F. Brown.....	Oct. 29, 1882.
45-47	"	Smith & Vanderbeek.....	Dec. 30, "
50	"	Runk, Unger & Co.....	Nov. 3, "
60	"	John Behrens.....	July 1, 1883.
83-85	"	Herron & Spencer.....	May 1, "
8	Warren Street.	Theodore Stewart.....	Oct. 26, 1882.
15	"	Lutz & Movius.....	Nov. 1, 1883.
18	"	Butler & Constant.....	Oct. 22, "
19	"	C. S. Parsons & Sons.....	Dec. 1, "
20	"	August Gast & Co.	Mar. 17, "
32	"	H. D. Aldrich Estate.....	March 1, "
34	"	E. E. Spencer.....	Sept. 8, 1882.
39	"	J. K. Krieg & Co.....	Feb. 26, 1883.
42-46	"	L. Straus & Sons.....	Oct. 1, "
48	"	J. J. Lattemann.....	July 1, "
55	"	I. Hays & Co.....	Nov. 17, 1882.
62	"	J. L. Black.....	Oct. 9, 1883.
62	"	L. B. Spencer.....	Dec. 1, "
68	"	Wemple & Co.....	Feb. 7, "
74	"	S. & W. Mela.....	Oct. 26, 1882.
76	"	Michael Cavanagh.....	Dec. 5, "
77	"	E. W. Sniffen.....	May 1, 1883.
79	"	James L. Arcularius.....	Oct. 6, "
80	"	Weil Brothers.....	July 12, 1882.
85	"	Geo. S. Evans & Co.....	May 1, 1883.
85	"	Streeter & Rowland.....	Oct. 16, "
89-91	"	Geo. B. Whitmore.....	Oct. 15, "
94	"	F. Majewski & Co.....	Aug. 6, "
79-81	Reade Street..	Jos. S. Kaliske.....	Nov. 1, "
83	"	David Williams.....	May 1, "
72	William St....	Oil, Paint & Drug Pub. Co..	Nov. 1, "
77	"	Hoadley & Co.....	May 1, "
78	"	Henry A. Gould.....	Oct. 20, "
78	"	Taft, Hogins & Co.....	Oct. 20, "
80-82	"	E. I. Horsman.....	July 1, "
5-7	Nassau St.....	Continental Nat'l Bank.....	Nov. 1, "

28-38	Nassau St.....	Mutual Life Ins. Co. of N. Y.		
28-38	"	Daniel Dull.....	Sept. 10,	1883.
113	"	Chas. Hurst.....	Mar. 1,	"
144	"	Banks & Brothers.....	Dec. 19,	1882.
154-164	"	The N. Y. Tribune.....	Nov. 1,	1883.
3	Park Row.....	The Sunday Mercury.....	June 26,	"
13-15	"	Charles A. Cheever.....	May 1,	"
21	"	Demas Barnes.....	Aug. 14,	"
23	"	The Mail & Express.....	June 19,	"
31-32	"	The World.....	Jan. 19,	"
33	"	Chas. St. Clair.....	Dec. 7,	1882.
34	"	O. Hitchcock & Son.....	Sept. 29,	1883.
39-40	"	Nash & Crook.....	Nov. 15,	1882.
39-41	"	The N. Y. Times.....	July 1,	1883.
1	N'w Church St.	A. Simis & Co.....	Dec. 21,	1882.
16	"	Faulkner & Bird.....	Jan. 8,	1883.
137-139	Greenwich St.	Fuller Bros. & Co.....	Nov. 1,	"
142	"	The Pictet Artificial Ice Co.	June 26,	"
142-146	"	Met. Telephone & Tel. Co...	Jan. 11,	"
173-175	"	G. W. White.....	March 8,	"
178	"	Jas. D. Hall.....	Sept. 15,	1882.
184-186	"	R. W. Robinson & Co.....	Oct. 26,	"
187	"	North River Bank.....	Oct. 18,	"
198	"	Smith & McNell.....	June 1,	"
203	"	J. D. Gilmor.....	July 7,	"
204	"	Joseph Stiner & Co.....	Dec. 5,	"
205	"	Harty Brothers.....	Nov. 3,	"
215	"	Peter Duryee & Co..	Nov. 1,	1883.
218-220	"	Hall & Ruckel.....	Nov. 24,	1882.
242-246	"	Hills Brothers.....	Oct. 26,	1882.
252	"	The Hammerschlag Mfg Co.	May 8,	"
265-267	"	Berry, Wisner & Lohman...	May 1,	1883.
276	"	Chas. F. Mattlage.....	Oct. 25,	1882.
285-287	"	Irving Nat'l Bank.....	Oct. 9,	1883.
226-228	Washington St.	Matthew Dean & Co.....	Nov. 1,	"
116	West Street...	Daniel Toffey & Co.....	May 1,	"



